

BRUHAT BANGALORE MAHANAGARA PALIKE

Executive Engineer-Dasarahalli Division

Detailed Estimate

Name of the Work : Improvements of Roads and Other works in Abbigere Pashchimcounty and surrounding area in Ward No.12 Shettyhalli Sub Division.

Jobcode: 012-20-000109

Peode: P2573

Estimate Amount : 100.00 Lakhs

Sl. No.	Particulars	No	L	B	D	Quantity	Rate	Amount
C.M (1:3) (KPWD SR 2018-19, Page								
1	Removing & Refixing stone slabs of drains and pointing in C.M (1:3) (KPWD SR 2018-19, Page No.27, Item No.5.33)							
	1st cross road	2	170.00	0.90		306.00		
	1st main road from 1st cross road to Dead end	2	188.00	0.90		338.40		
	2nd cross road from 1st main road to dead end (LHS)	2	87.00	0.90		156.60		
	2nd cross road from 1st main road to dead end (RHS)	2	40.00	0.90		72.00		
	3rd cross road from 1st main road to dead end (LHS)	2	86.00	0.90		154.80		
	3rd cross road from 1st main road to dead end (RHS)	2	32.00	0.90		57.60		
	4th cross road from 1st main road to dead end (LHS)	2	75.00	0.90		135.00		
	5th cross road from 1st main road to dead end (LHS)	2	43.00	0.90		77.40		
	Total					1297.80	111.30	144445.14
						Sqm		
	Basic rate	105.00						
	Area Wiegthage @ 6%	6.30						
	Total Rate in Rs	111.30						
2	KSRRB 300-45. Scarifying by manual means stone metal crust 50mm to 100mm thick along with premix carpet / surface dressing and stacking of old serviceable materials including cost of all labour charges complete as per specifications. MORTH / Chapter 3 (KPWD SR 2018-19, Page No.146, Item No.19.51)							
	Either side of the road							
	1st cross road	1	170.00	7.50	0.25	318.75		
	1st main road from 1st cross road to Dead end	1	188.00	5.50	0.25	258.50		
	2nd cross road from 1st main road to dead end (LHS)	1	87.00	5.50	0.25	119.63		
	2nd cross road from 1st main road to dead end (RHS)	1	40.00	5.50	0.25	55.00		
	3rd cross road from 1st main road to dead end (LHS)	1	86.00	5.50	0.25	118.25		
	3rd cross road from 1st main road to dead end (RHS)	1	32.00	5.50	0.25	44.00		
	4th cross road from 1st main road to dead end (LHS)	1	75.00	5.50	0.25	103.13		
	5th cross road from 1st main road to dead end (LHS)	1	43.00	5.50	0.25	59.13		
	Total					1076.38		
						4305.52	87.49	376689.94
	1076.38/0.25=4305.52							
	Basic rate	80.00						
	Lead=2x1.28x15km=95.40	2.69						
	Area Wiegth age @ 6%	4.80						
	Total Rate in Rs	87.49						

S. No.	Particulars	No	L	B	D	Quantity	Rate	Amount
3	KSRRB 300-1. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (KPWD SR 2018 19, Page No.143, Item No.19.1)							
	UGD & Water supply Cutting							
	1st cross road	2	170.00	1.00	0.40	136.00		
	1st main road from 1st cross road to Dead end	2	188.00	1.00	0.40	150.40		
	2nd cross road from 1st main road to dead end (LHS)	2	87.00	1.00	0.40	69.60		
	2nd cross road from 1st main road to dead end (RHS)	2	40.00	1.00	0.40	32.00		
	3rd cross road from 1st main road to dead end (LHS)	2	86.00	1.00	0.40	68.80		
	3rd cross road from 1st main road to dead end (RHS)	2	32.00	1.00	0.40	25.60		
	4th cross road from 1st main road to dead end (LHS)	2	75.00	1.00	0.40	60.00		
	5th cross road from 1st main road to dead end (LHS)	2	43.00	1.00	0.40	34.40		
	Total					576.80	233.20	134509.76
	Cum							
	Basic rate	130.00						
	Lead=2x1.28x15km=95.40	95.40						
	Area Weightage @ 6%	7.80						
	Total Rate in Rs	233.20						
4	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occurring during rolling including cost of all labour, HOM complete as per specifications. MORTH I Chapter 3(KPWD SR 2018-19, Page No.147, Item No.19.64)							
	1st cross road	1	170.00	7.50		1275.00		
	1st main road from 1st cross road to Dead end	1	188.00	5.50		1034.00		
	2nd cross road from 1st main road to dead end (LHS)	1	87.00	5.50		478.50		
	2nd cross road from 1st main road to dead end (RHS)	1	40.00	5.50		220.00		
	3rd cross road from 1st main road to dead end (LHS)	1	86.00	5.50		473.00		
	3rd cross road from 1st main road to dead end (RHS)	1	32.00	5.50		176.00		
	4th cross road from 1st main road to dead end (LHS)	1	75.00	5.50		412.50		
	5th cross road from 1st main road to dead end (LHS)	1	43.00	5.50		236.50		
	Total					4305.50	6.36	27382.98
	Basic Rate	6.00						
	Area weightage	0.36						
	Total Rate in Rs	6.36						
5	Item No: 13 Stone Dust/Grit 4.75 mm to 0.075 mm etc., Complete work has to be carried out according to the Directions of Engineer in charge of work.							
	UGD & Water supply Cutting							
	1st cross road	2	170.00	1.00	0.10	34.00		
	1st main road from 1st cross road to Dead end	2	188.00	1.00	0.10	37.60		
	2nd cross road from 1st main road to dead end (LHS)	2	87.00	1.00	0.10	17.40		
	2nd cross road from 1st main road to dead end (RHS)	2	40.00	1.00	0.10	8.00		

No.	Particulars	No	L	B	D	Quantity	Rate	Amount
	3rd cross road from 1st main to dead end (LHS)	2	86.00	1.00	0.10	17.20		
	3rd cross road from 1st main to dead end (RHS)	2	32.00	1.00	0.10	6.40		
	4th cross road from 1st main road to dead end (LHS)	2	75.00	1.00	0.10	15.00		
	5th cross road from 1st main to dead end (LHS)	2	43.00	1.00	0.10	8.60		
					Total	144.20	1000.00	144200.00
					Cum			
	Basic rate	6.00						
	Area Wiegthage @ 6%	0.36						
	Total Rate in Rs	6.36						
6	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. Clause 401 of MORTH V Revision. (KPWD SR 2018-19, Page No.153, Item No.20.5)							
	1st cross road	1	170.00	7.50	0.10	127.50		
	1st main road from 1st cross road to Dead end	1	188.00	5.50	0.10	103.40		
	2nd cross road from 1st main road to dead end (LHS)	1	87.00	5.50	0.10	47.85		
	2nd cross road from 1st main road to dead end (RHS)	1	40.00	5.50	0.10	22.00		
	3rd cross road from 1st main to dead end (LHS)	1	86.00	5.50	0.10	47.30		
	3rd cross road from 1st main to dead end (RHS)	1	32.00	5.50	0.10	17.60		
	4th cross road from 1st main road to dead end (LHS)	1	75.00	5.50	0.10	41.25		
	5th cross road from 1st main to dead end (LHS)	1	43.00	5.50	0.10	23.65		
	UGD & Water supply							
	Cutting							
	1st cross road	2	170.00	1.00	0.10	34.00		
	1st main road from 1st cross road to Dead end	2	188.00	1.00	0.10	37.60		
	2nd cross road from 1st main road to dead end (LHS)	2	87.00	1.00	0.10	17.40		
	2nd cross road from 1st main road to dead end (RHS)	2	40.00	1.00	0.10	8.00		
	3rd cross road from 1st main to dead end (LHS)	2	86.00	1.00	0.10	17.20		
	3rd cross road from 1st main to dead end (RHS)	2	32.00	1.00	0.10	6.40		
	4th cross road from 1st main road to dead end (LHS)	2	75.00	1.00	0.10	15.00		
	5th cross road from 1st main to dead end (LHS)	2	43.00	1.00	0.10	8.60		
					Total	574.75	1994.92	1146580.27
					Cum			
	Basic rate	1882.00						
	Area Wiegthage @ 6%	112.92						
	Total Rate in Rs	1994.92						

Sl. No.	Particulars	No	L	B	D	Quantity	Rate	Amount
7	KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (KPWD SR 2018-19, Page No.155, Item No.20.18)							
	1st cross road	1	170.00	7.50	0.20	255.00		
	1st main road from 1st cross road to Dead end	1	188.00	5.50	0.20	206.80		
	2nd cross road from 1st main road to dead end (LHS)	1	87.00	5.50	0.20	95.70		
	2nd cross road from 1st main road to dead end (RHS)	1	40.00	5.50	0.20	44.00		
	3rd cross road from 1st main road to dead end (LHS)	1	86.00	5.50	0.20	94.60		
	3rd cross road from 1st main road to dead end (RHS)	1	32.00	5.50	0.20	35.20		
	4th cross road from 1st main road to dead end (LHS)	1	75.00	5.50	0.20	82.50		
	5th cross road from 1st main road to dead end (LHS)	1	43.00	5.50	0.20	47.30		
	Add for SSM	2	721.00	0.40	0.10	57.68		
	Basic rate	1888.00				Total	918.78	2001.28
	Area Weightage @ 6%	113.28				Cum		1838736.04
	Total Rate in Rs	2001.28						
8	KSRRB M2200-5.12. Providing and laying Design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.7 cum and fine aggregates @ 0.47 cum, with superplasticiser @ 3lts confirming to IS9103-1999 Reaffirmed-2008. i) Upto 5 m height. (PW,P& IWTDR SR 2018-19 P-227, I-28.7.12)							
		2	721.00	0.40	0.20	115.36		
	Total Qty					115.36	5775.38	666247.63
	Basic Rate	5321.00						
	Deduct Cement Rate as per SR 2018-19	0.00						
	Sub Total	5321.00						
	Add Cement Rate as per issue	0.00						
	Total	5321.00						
	Basic Rate	5448.47						
	Area Weightage@6%	326.91						
	Total Rate	5775.38						
9	Providing and constructing granite I trap / basalt size stone masonry in foundation with cement mortar & stone hammerd dressed in courses not less than 20 cms high, bond stones at 2m. apart in each course including cost of materials, labour, HOM, curing complete as per specifications. KBS 5.1.13 (PW,P& IWTDR SR 2018-19 P-255, I-34.8.1)							
		2	721.00	0.40	0.40	230.72		
	Total Qty					230.72	4763.64	1099067.02
	Basic Rate	4494.00						
	Area Weightage@6%	269.64						
	Total Rate	4763.64						
10	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. Clause 502 of MORTH V revision (KPWD SR 2018-19, Page No.158, Item No.21.6)(Issued Rate 01/07/2020)							
	1st cross road	1	170.00	7.50		1275.00		

Sl. No.	Particulars	No	L	B	D	Quantity	Rate	Amount
	1st main road from 1st cross road to Dead end	1	188.00	5.50		1034.00		
	2nd cross road from 1st main road to dead end (LHS)	1	87.00	5.50		478.50		
	2nd cross road from 1st main road to dead end (RHS)	1	40.00	5.50		220.00		
	3rd cross road from 1st main road to dead end (LHS)	1	86.00	5.50		473.00		
	3rd cross road from 1st main road to dead end (RHS)	1	32.00	5.50		176.00		
	4th cross road from 1st main road to dead end (LHS)	1	75.00	5.50		412.50		
	5th cross road from 1st main road to dead end (LHS)	1	43.00	5.50		236.50		
	Basic rate	28.00				Total	4305.50	29.68
	Area Wight age @ 6%	1.68				Sqm		127787.24
	Total Rate in Rs	29.68						
11	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications. Clause 503 of MORTH V revision (KPWD SR 2018-19, Page No.158, Item No.21.7)(Issued Rate 01/07/2020)							
	1st cross road	1	170.00	7.50		1275.00		
	1st main road from 1st cross road to Dead end	1	188.00	5.50		1034.00		
	2nd cross road from 1st main road to dead end (LHS)	1	87.00	5.50		478.50		
	2nd cross road from 1st main road to dead end (RHS)	1	40.00	5.50		220.00		
	3rd cross road from 1st main road to dead end (LHS)	1	86.00	5.50		473.00		
	3rd cross road from 1st main road to dead end (RHS)	1	32.00	5.50		176.00		
	4th cross road from 1st main road to dead end (LHS)	1	75.00	5.50		412.50		
	5th cross road from 1st main road to dead end (LHS)	1	43.00	5.50		236.50		
	Basic rate	12.00				Total	4305.50	12.72
	Area Wight age @ 6%	0.72				Sqm		54765.96
	Total Rate in Rs	12.72						
12	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading; premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and ialignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 505 of MORTH V revision using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II Cum (50 mm to 75 mm) with 4.5 % VG-30 Bitumen .(KPWD SR 2018-19, Page No.160, Item No.21.17.6)(Issued Rate 01/07/2020)							
	1st cross road	1	170.00	7.50	0.05	63.75		
	1st main road from 1st cross road to Dead end	1	188.00	5.50	0.05	51.70		
	2nd cross road from 1st main road to dead end (LHS)	1	87.00	5.50	0.05	23.93		
	2nd cross road from 1st main road to dead end (RHS)	1	40.00	5.50	0.05	11.00		

Particulars	No	L	B	D	Quantity	Rate	Amount
3rd cross road from 1st main to dead end (LHS)	1	86.00	5.50	0.05	23.65		
3rd cross road from 1st main to dead end (RHS)	1	32.00	5.50	0.05	8.80		
4th cross road from 1st main road to dead end (LHS)	1	75.00	5.50	0.05	20.63		
5th cross road from 1st main to dead end (LHS)	1	43.00	5.50	0.05	11.83		
Basic rate	6045.00			Total	215.28	6407.70	1379417.62
Area Wiegth age @ 6%	362.70			Cum			
Total Rate in Rs	6407.70					8485.72	

13 Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015.using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) (KPWD SR 2018-19, Page No.162, Item No.21.78.12)(Issued Rate 01/07/2020)

1st cross road	1	170.00	7.50	0.04	51.00		
1st main road from 1st cross road to Dead end	1	188.00	5.50	0.04	41.36		
2nd cross road from 1st main road to dead end (LHS)	1	87.00	5.50	0.04	19.14		
2nd cross road from 1st main road to dead end (RHS)	1	40.00	5.50	0.04	8.80		
3rd cross road from 1st main to dead end (LHS)	1	86.00	5.50	0.04	18.92		
3rd cross road from 1st main to dead end (RHS)	1	32.00	5.50	0.04	7.04		
4th cross road from 1st main road to dead end (LHS)	1	75.00	5.50	0.04	16.50		
5th cross road from 1st main to dead end (LHS)	1	43.00	5.50	0.04	9.46		
Basic rate	7111.00			Total	172.22	7537.66	1298135.81
Area Wiegth age @ 6%	426.66			Cum			
Total Rate in Rs	7537.66					9590.88	

14 KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/Concrete Surface: Providing and laying of hot applied thermoplasticcompound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (KPWD SR 2018-19, Page No.146, Item No.19.52)

1st cross road	2.50	170.00	0.10		42.50		
1st main road from 1st cross road to Dead end	2.50	188.00	0.10		47.00		
2nd cross road from 1st main road to dead end (LHS)	2.50	87.00	0.10		21.75		
2nd cross road from 1st main road to dead end (RHS)	2.50	40.00	0.10		10.00		
3rd cross road from 1st main to dead end (LHS)	2.50	86.00	0.10		21.50		
3rd cross road from 1st main to dead end (RHS)	2.50	32.00	0.10		8.00		
4th cross road from 1st main road to dead end (LHS)	2.50	75.00	0.10		18.75		

Sl. No.	Particulars	No	L	B	D	Quantity	Rate	Amount
15	5th cross road from 1st main to dead end (LHS)	2.50	43.00	0.10		10.95		79350.00
	Basic rate	429.00			Total	1715.50	454.74	819668.85
	Area Weight age @ 6%	25.74				1802.50		81966.68
	Total Rate in Rs	454.74				1802.50		851992.29
16								853669.00
17								8532871.37
18								841314.85
19								1023944.56
20								85328.71
								16540.50
								10000000.00

Certificate:-

1. That the workspot inspected by me and found work is necessary.
2. That the area comes within the Bruhat Bangalore Mahanagara Palike Limits.
3. That the rates are adopted based on the PWD SR of 2018-19 (Issue Rate 01/07/2020)
4. That the provisions made in the estimate are necessary and quite essential.

Assistant Engineer
Ward No.12
BBMP

Asst. Executive Engineer
Shettyhalli Sub-Division
BBMP

Executive Engineer
Dasarahalli Division
BBMP

ADMINISTRATIVELY SANCTIONED FOR
(Rupees) 100,00,000/-
One hundred lakhs only
Under the Head of Account.....
Registered as no EE(D.D.)/AS. 02 Subject to conditions contained in Enclosed Memo
No. 02 Dt. 05.05.2021
JE (DASARAHALLI) BBMP

Technically Sanctioned For Rs: 100,00,000/-
Rs. In Words 100 lakhs
C + Hundred lakhs
Under.....
Job Code No. 012-20-000109
Registered as SE No. 117 Dated 17-06-2021
to conditions contained in Enclosed Memo
No. 117 Dt. 17-06-2021
AE / JE

Technically Sanctioned For Rs: 100,00,000/-
Rs. In Words.....
Under.....
Job Code No.....
Registered as SE No.....
to conditions contained in Enclosed Memo
No. Dt.
AE / JE TA SE(D)